

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,408,978 B2  
APPLICATION NO. : 10/657435  
DATED : August 5, 2008  
INVENTOR(S) : Pan et al.

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the title page, item [56] OTHER PUBLICATIONS, page 1, right column, line 8, after the words “MD: The”, delete “John” and insert therefor --Johns--.

At column 2, line 11, before the word “wherein”, delete “drawing” and insert therefor --drawings--.

At column 2, line 44, after “signal,  $r$ , is”, insert --a--.

At column 5, line 30, before the words “both of”, delete “ $R_{CIR}$  and  $H_{CIR}$ ” and insert therefor -- $R_{Cir}$  and  $H_{Cir}$ --.

At column 5, line 32, after “ $H_{Cir}^H$  and”, delete “ $H_{SE} + n_E$ ” and insert therefor -- $H_{SE} + n_E$ --.

At column 5, line 41, before the words “is an error”, delete “ $H_s = H_{Cir} - H_{\Delta} (H_{\Delta})$ ” and insert therefor -- $H_s = H_{Cir} - H_{\Delta} (H_{\Delta})$ --.

At column 5, line 51, after the word “matrix”, delete “ $H_{\Delta}$ ” and insert therefor -- $H_{\Delta}$ --.

At column 6, line 32, before “and  $H_{\Delta}$ ” delete “ $H^{CirH_s}$ ”, and insert therefor -- $H_{Cir}^H$ --.

At column 6, line 53, after the words “all elements of”, delete “ $y = H_{Cir}^H H_{\Delta} S_E = X_{SE}$ ” and insert therefor -- $y = H_{Cir}^H H_{\Delta} S_E = X_{SE}$ --.

At column 7, line 36, before the words “for  $m=1,2 \dots, M$ .” delete “ $h_{W-m}$ ”) and insert therefor -- $h_{W-1,m}$ )--.

At column 7, line 54, delete Equation 18, and insert therefor -- $L_m = \max \{L\} + \max \{W\} + \epsilon$ --.

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At column 7, line 56, before the words “is a”, delete “ $\in$ ” and insert therefor -- $\epsilon$ --.

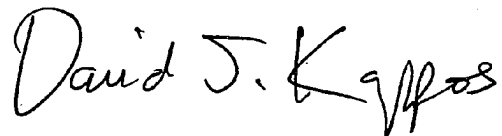
At column 7, line 59, before the words “is chosen”, delete “ $\in$ ” and insert therefor -- $\epsilon$ --.

At column 9, line 20, after the word “vector”, delete “ $\tilde{s}$ ” and insert therefor --  $\hat{s}$  --.

At column 12, line 65, after the word “responses”, delete “ $h_1 h_m$ ” and insert therefor -- $h_1 \dots h_m$ --.

Signed and Sealed this

Sixth Day of October, 2009

A handwritten signature in black ink, reading "David J. Kappos". The signature is written in a cursive, flowing style with a large, stylized 'D' and 'K'.

David J. Kappos  
*Director of the United States Patent and Trademark Office*